

LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

1.-9. (Cancelled)

10. (Previously presented) A stripping method which comprises stripping a resist film on a semiconductor wafer having an exposed metal film, by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, (c) a hydroxylamine, (d) water and (e) a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components, wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the exposed metal film.

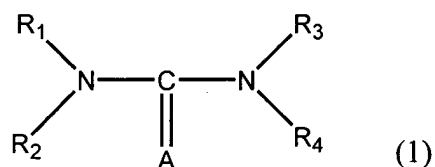
11. (Previously presented) A stripping method which comprises stripping a resist film on a semiconductor wafer having an exposed metal film, by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, (c) a hydroxylamine, (d) water and (e) a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components,

wherein the amounts of the components (a), (b), (c) and (d) are 1 to 60% by mass, 0.1 to 20% by mass, 5 to 70% by mass and 2 to 40% by mass, respectively, and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the exposed metal film.

12. (Previously presented) A stripping method which comprises stripping a resist film on a semiconductor wafer having an exposed metal film, by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components,

wherein the component (a) is a compound represented by the following general formula (1):



(R1, R2, R3 and R4 are each independently a hydrogen atom or an alkyl group having 1 to 3 carbon atoms; and A is an oxygen atom or a sulfur atom), and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the exposed metal film.

13. (Previously presented) A stripping method which comprises stripping a resist film on a semiconductor wafer having an exposed metal film, by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, having a benzene derivative having at least two phenolic hydroxyl groups in the molecule, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components, wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the exposed metal film.

14. (Previously presented) A stripping method which comprises stripping a resist film on a semiconductor wafer having an exposed metal film, by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components,

wherein the component (b) is a benzene derivative having at least two phenolic hydroxyl groups in the molecule having at least one compound selected from the group consisting of pyrogallol, hydroxyhydroquinone, fluoroglucinol, gallic acid and tannic acid, and

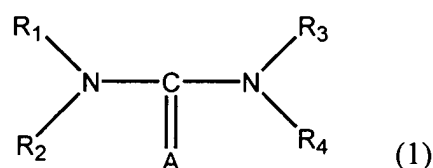
wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the exposed metal film.

15. (Cancelled)

16. (Previously presented) A stripping method which comprises:
forming, on a semiconductor wafer, a metal film and an insulating film in this order;
forming a resist film thereon;
conducting dry etching with the resist film being used as a mask, to form, in the insulating film, dents reaching the metal film; then
stripping the resist film and/or the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, (c) a hydroxylamine or an alkanolamine, (d) water, and (e) a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components, wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

17. (Previously presented) A stripping method which comprises:
forming, on a semiconductor wafer, a metal film and an insulating film in this order;
forming a resist film thereon;
conducting dry etching with the resist film being used as a mask, to form, in the insulating film, dents reaching the metal film; then
stripping the resist film and/or the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, (c) a hydroxylamine or an alkanolamine, (d) water, and (e) a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components, wherein the amounts of the components (a), (b), (c) and (d) are 1 to 60% by mass, 0.1 to 20% by mass, 5 to 70% by mass and 2 to 40% by mass, respectively, and wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

18. (Previously presented) A stripping method which comprises:
forming, on a semiconductor wafer, a metal film and an insulating film in this order;
forming a resist film thereon;
conducting dry etching with the resist film being used as a mask, to form, in the insulating film, dents reaching the metal film; then
stripping the resist film and/or the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components,
wherein the component (a) is a compound represented by the following general formula (1):



(R1, R2, R3 and R4 are each independently a hydrogen atom or an alkyl group having 1 to 3 carbon atoms; and A is an oxygen atom or a sulfur atom), and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

19. (Previously presented) A stripping method which comprises:
forming, on a semiconductor wafer, a metal film and an insulating film in this order;
forming a resist film thereon;
conducting dry etching with the resist film being used as a mask, to form, in the insulating film, dents reaching the metal film; then
stripping the resist film and/or the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative and (b) a hydroxy aromatic compound, having a benzene derivative having at least two phenolic hydroxyl groups in the molecule, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components, wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

20. (Previously presented) A stripping method which comprises:
forming, on a semiconductor wafer, a metal film and an insulating film in this order;
forming a resist film thereon;
conducting dry etching with the resist film being used as a mask, to form, in the insulating film, dents reaching the metal film; then
stripping the resist film and/or the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components,
wherein the component (b) is a benzene derivative having at least two phenolic hydroxyl groups in the molecule having at least one compound selected from the group consisting of pyrogallol, hydroxyhydroquinone, fluoroglucinol, gallic acid and tannic acid, and
wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

21. (Cancelled)

22. (Previously presented) A stripping method which comprises:

forming, on a semiconductor wafer, a metal film, a first insulating film and a second insulating film having desired openings;

conducting dry etching with the second insulating film being used as a mask, to form, in the first insulating film, dents reaching the metal film; then

stripping the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, (c) a hydroxylamine or an alkanolamine, (d) water and (e) a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components, wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

23. (Previously presented) A stripping method which comprises:

forming, on a semiconductor wafer, a metal film, a first insulating film and a second insulating film having desired openings;

conducting dry etching with the second insulating film being used as a mask, to form, in the first insulating film, dents reaching the metal film; then

stripping the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, (c) a hydroxylamine or an alkanolamine, (d) water and (e) a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components,

wherein the amounts of the components (a), (b), (c) and (d) are 1 to 60% by mass, 0.1 to 20% by mass, 5 to 70% by mass and 2 to 40% by mass, respectively, and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

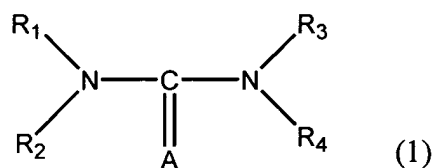
24. (Previously presented) A stripping method which comprises:

forming, on a semiconductor wafer, a metal film, a first insulating film and a second insulating film having desired openings;

conducting dry etching with the second insulating film being used as a mask, to form, in the first insulating film, dents reaching the metal film; then

stripping the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components,

wherein the component (a) is a compound represented by the following general formula (1):



(R1, R2, R3 and R4 are each independently a hydrogen atom or an alkyl group having 1 to 3 carbon atoms; and A is an oxygen atom or a sulfur atom), and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

25. (Previously presented) A stripping method which comprises:

forming, on a semiconductor wafer, a metal film, a first insulating film and a second insulating film having desired openings;

conducting dry etching with the second insulating film being used as a mask, to form, in the first insulating film, dents reaching the metal film; then

stripping the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative and (b) a hydroxy aromatic compound, having a benzene derivative having at least two phenolic hydroxyl groups in the molecule, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones, as essential components, and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

26. (Previously presented) A stripping method which comprises:

forming, on a semiconductor wafer, a metal film, a first insulating film and a second insulating film having desired openings;

conducting dry etching with the second insulating film being used as a mask, to form, in the first insulating film, dents reaching the metal film; then

stripping the residue of etching by using a stripper composition containing an anticorrosive agent which contains (a) urea or a urea derivative, (b) a hydroxy aromatic compound, and a water soluble organic solvent selected from the group including sulfoxides, dimethylformamides, dimethyl acetamides, glycols, glycol ethers, pyrrolidones, imidazolidinones as essential components,

wherein the component (b) is a benzene derivative having at least two phenolic hydroxyl groups in the molecule having at least one compound selected from the group consisting of pyrogallol, hydroxyhydroquinone, fluoroglucinol, gallic acid and tannic acid, and

wherein components (a) and (b) supplement each other to form a coating layer that imparts hydrophobicity to the metal film.

27. (Cancelled)

28. (Original) A stripping method according to Claim 10, wherein the metal film is a copper film.

29. (Original) A stripping method according to Claim 11, wherein the metal film is a copper film.